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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,327	12/06/2001	Charles A. Nicolette	GZ 2101.20	8127

7590 01/27/2005

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San Francisco, CA 94111-4067

EXAMINER	
YU, MISOOK	

ART UNIT	PAPER NUMBER
1642	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/017,327	NICOLETTE, CHARLES A.	
	Examiner	Art Unit	
	MISOOK YU, Ph.D.	1642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) *5,8-13,16-18 and 22-29* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6,7,14,15 and 19-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/7/02, ~~4/2/02~~.* 4/22/02, 2/19/03, 8/19/02
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *Exhibit A (seq. alignment)*.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of group 1 encompassing claims 1, 7, and 14 as linking claims, and claims 2-6, 13, 15, 19-21, with species ovary and nucleic acid encoding EQ ID NO:11 as the species in the reply filed on 11/04/2004 is acknowledged. Applicant's argument that the requirement for species election is unreasonable because the peptides sequences in the claims are uncomplicated sequences, and the biological samples do not put a serious burden on the Office. These arguments have been fully considered but found unpersuasive because the biological samples are diverse, i.e., both solid tissues and non-solid tissues i.e. blood, and the subject matter is method of aiding cancer diagnosis. As the art rejection below indicates, method of aiding diagnosing cancer with tissues or biological samples of different origins are unpredictable. As for election of the probe sequences used in the method, search would be expanded if the elected species is free of art. Applicant does not argue the restriction requirement into the five different groups.

Claims 8-12, 16-18, 22-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claims 5, and 13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

Claims 1-29 are pending. Claims 1-4, 6, 7, 14, 15, 19-21 are examined on merits.

Specification

The specification is objected because the specification, especially claim 5, and other places indicate that SEQ ID NO:12 should be in the instant application. However, SEQ ID NO:12 does not exist in the instant specification. Appropriate correction is required.

Priority

The instant application claims priority benefit to the Provisional Application 60/209,391 field on 05/31/2000. However, the instantly claimed invention does not have a support in the Provisional Application 60/209,391, therefore, the priority benefit to 05/31/2000 is denied.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6, 7, 14, 19, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by **Nupponen** et al., IDS filed on 08/19/02, Am J Pathol. 1999 Jun;154(6):1777-83.

The claims are interpreted as drawn to cancer diagnosis by measuring an amount of mRNA transcript encoding a p40 unit of an elf3 protein using a probe made

from nucleic acid encoding instant SEQ ID NO:11 using various art-known hybridization conditions, wherein at least 2 fold greater expression as compared to normal control (claim 7) is indicative cancer.

Nupponen et al., at the abstract teach "Expression of p40 mRNA was analyzed with in situ hybridization. The amplification of eIF3-p40 gene was associated with overexpression of its mRNA, as expected for a functional target gene of the amplification. These results imply that genomic aberrations of translation initiation factors, such as eIF3-p40, may contribute to the pathogenesis of breast and prostate cancer.", and also teach that all the necessary reagents and procedures and probes at pages 1777-1779 under the heading "Materials and Methods".

As for the claim 6, Nupponen et al., disclose several probes for example, elf3-p40 exon 3 to 5, and 1,2 kb insert at page 1778, right column. Based on Asano et al., IDS, filed on 08/19/02, J. Biol. Chem. vol. 272, pages 27042-52, the probes appears to comprises a nucleic acid sequence encoding instant SEQ ID NO:11, since instant SEQ ID NO:11 is amino acid residues of 242-250 of Asano et al., as shown in Fig. 5B. Note the attached sequence alignment (Exhibit A). The Office does not have the facilities and resources to provide the factual evidence needed in order to establish that the probe of the prior art does not possess the same structural characteristics of the instantly claimed probe. In the absence of evidence to the contrary, the burden is on the applicant to prove that the claimed probe is different from those taught by the prior art and to establish patentable differences. See In re Best 562F.2d 1252, 195 USPQ

430 (CCPA 1977) and Ex parte Gray 10 USPQ 2d 1922 (PTO Bd. Pat. App. & Int. 1989).

Thus, Nupponen et al., anticipate claims 1-4, 6, 7, 14, 19, and 21.

Claims 1-4, 7, 14, 15, 19, and 21 are rejected under **35 U.S.C. 102(b)** as being anticipated by **Tymms et al.,** Oncogene. 1997 Nov 13;15(20):2449-62.

The claims are interpreted as drawn to cancer diagnosis by measuring an amount of mRNA transcript encoding an elf3 protein using a probe with various art-known hybridization conditions, wherein at least 2 fold greater expression as compared to normal control (claim 7) is indicative of cancer.

Tymms et al., teach at page 2453, the paragraph bridging right and left columns, Fig. 5d that the higher expression of elf3 was detected in primary lung cancer tissues samples as compared to normal sample. Also note page 2460 under the heading "RNase protein protection analysis" probes and other art-known procedure for carrying out detection of mRNA. Thus, **Tymms et al.**, anticipate Claims 1-4, 7, 14, 15, 19, and 21 .

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 7, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tymms et al., (cited above).

The claims are interpreted as drawn to aiding in ovarian (the elected species) cancer diagnosis by measuring an amount of mRNA transcript encoding an elf3 protein, wherein at least 2 fold greater expression as compared to normal control is indicative of cancer diagnosis.

Tymms et al., teach all the reagents and probes for detection of the amount of transcript encoding the elf3 shown in Fig. 1a at page using a lung cancer sample, and control normal sample.

Tymms et al., do not directly test ovary tissues samples.

However, Tymms et al., at the paragraph bridging pages 2449-50 teach one of the most common solid tumors in human are carcinomas arise from the transformation of epithelial cells including ovarian epithelial cells, and also suggests that the chromosome region containing the elf3 protein is epithelial tumors of ovary. Note also abstract.

Therefore, it would have been obvious to use the claimed method with reasonable expectation of success for aiding in diagnosis of epithelial origin of ovarian tumors for reasonable expectation given teachings of all the necessary reagents and probe and method of contacting the experiments.

Claims 1, 3, 15, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tymms et al., (cited above) in view of U.S. Pat. No. 5,445,934 (Aug. 29, 1995).

The claims are interpreted as drawn to aiding in cancer by measuring an amount of mRNA transcript encoding an elf3 protein using a probe on a solid support or on a chip.

Tymms et al., teach all the reagents and probes for detection of the amount of transcript encoding the elf3 shown in Fig. 1a at page using a lung cancer sample, and control normal sample. See 102 (b) rejection above for further detail.

Tymmes et al., do not teach a probe on a chip.

However, U.S. Pat. No. 5,445,934 throughout the entire patent teaches that oligonucleotide probes immobilized on a solid support or on a chip is a well known technology well before the effective filing date of the instant application.

Therefore, it would have been obvious to use the probe on a chip for detection of mRNA encoding the elf3 protein of Tymmes et al., with a reasonable expectation of success.

Claims 1, 7, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nupponen** et al., (cited above) in view of Tymms et al., (cited above).

The claims are interpreted as drawn to method of aiding ovarian cancer diagnosis by detecting elf3-p40 expression by at least 2 fold greater than in a normal control sample.

Nupponen et al., teach method of aiding two other epithelial cancers diagnosis by detecting elf3-p40 expression by at least 2 fold greater than in a normal control sample. Note 102 (b) rejection above for further detail.

Nupponen et al., do not teach ovarian cancer is epithelial cancer related to the two other epithelial cancers that express at least 2 fold greater as compared to normal sample.

However, Tymms et al., suggest a tumor marker for a one epithelial tumor might be a marker for another epithelial tumor.

Given no data present in the instant specification about aiding ovarian cancer diagnosis by detecting elf4-p40 overexpression, other than the assertion at pages 46, and 47 of the specification:

> Further provided by the present invention are methods for aiding in the detecting, diagnosing, prognosing, and monitoring the progression, course, or stage of eIF3-related cancers or malignancies in subjects afflicted therewith. These invention methods comprise detecting the differential expression of an eIF3 protein in a sample isolated from a cell or tissue, wherein the presence and/or amount of the protein is indicative of the neoplastic condition of cell or tissue. An eIF3-related neoplasia is one in which the expression or expression of the protein serves as a marker for the neoplastic phenotype. A test sample which demonstrates the expression of the eIF3 protein at a level at least twice that observed in a control sample is considered to be indicative of cancer. Samples of cells or tissue can be provided free form or attached to a solid support and can be isolated from a tissue culture, commercially available cell line, from a patient biopsy or as in the case of use of the method for tissue imaging, in vivo.
>
> In one aspect, the method is practiced by detecting and/or quantifying mRNA encoding eIF3 protein or the protein itself by hybridization or PCR. Modification of current technology enables this method, e.g., detecting is by probing said sample with a probe or primer that specifically hybridizes under conditions of moderate or highly stringent conditions with said eIF3 mRNA. In one aspect, the probe or primer is detectably labeled. Examples of suitable probes include but are not limited to a sequence selected from the group consisting of SEQ ID NOs:. 1

and 12 and complements thereof; a nucleic acid sequence encoding a peptide selected from the group consisting of SEQ ID NOs.:2 and 11 and complements thereof; and probe or primer comprises at least 9 consecutive residues of a protein encoded by a nucleic acid encoding a sequence recited in SEQ ID NOs: 2 and 11, and complements thereof.

Nupponen et al., in view of Tymms et al., is obvious for the instantly claimed invention.

One of ordinary skill would be motivated to use the claimed invention for ovarian cancer marker for fast and efficient screening of ovarian cancer. One of ordinary skill would be able to practice the claimed invention with a reasonable expectation of given the teachings of all the reagents and procedures disclosed by Nupponen et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MISOOK YU, Ph.D. whose telephone number is 571-272-0839. The examiner can normally be reached on 8 A.M. to 5:30 P.M., every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey C Siew can be reached on 571-272-0787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MISOOK YU, Ph.D.
Examiner
Art Unit 1642

MISOOK YU
PATENT EXAMINER

Exhibit A
page 1 of 2

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: December 30, 2004, 20:29:59 ; Search time 10.5642 Seconds
(without alignments)
490.180 Million cell updates/sec

Title: US-10-017-327-11
Perfect score: 43
Sequence: 1 NLQLLMDRV 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt_02:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	43	100.0	352	1	IF33_HUMAN	O15372 homo sapien
2	43	100.0	352	2	Q6P9U8	Q6p9u8 rattus norv
3	43	100.0	352	2	AAH60586	Aah60586 rattus no
4	43	100.0	352	2	CAG33187	Cag33187 homo sapi
5	38	88.4	335	2	Q6P381	Q6p381 xenopus tro
6	38	88.4	335	2	AAH64151	Aah64151 xenopus t
7	38	88.4	352	1	IF33_MOUSE	Q91wk2 mus musculu
8	38	88.4	352	2	Q8BTX5	Q8btx5 mus musculu
9	37	86.0	473	2	Q8dju7	Q8dju7 synechococc
10	36	83.7	196	2	Q94BU3	Q94bu3 arabidopsis
11	36	83.7	311	2	Q8LAP2	Q8lap2 arabidopsis
12	36	83.7	311	2	Q9LMB2	Q9lmb2 arabidopsis
13	36	83.7	342	2	Q9LMB3	Q9lmb3 arabidopsis
14	35	81.4	133	2	Q9NZZ0	Q9nzz0 homo sapien
15	35	81.4	180	2	Q9Y221	Q9y221 homo sapien
16	35	81.4	180	2	Q9WV50	Q9wv50 rattus norv
17	35	81.4	180	2	Q9CXK8	Q9cxk8 mus musculu
18	35	81.4	180	2	Q9D1B4	Q9d1b4 mus musculu
19	35	81.4	180	2	AAH59114	Aah59114 rattus no
20	35	81.4	180	2	BAD05056	Bad05056 homo sapi
21	35	81.4	1742	2	Q7TT21	Q7tt21 mus musculu
22	35	81.4	1742	2	AAH60701	Aah60701 mus muscu
23	35	81.4	1809	1	TSC2_RAT	P49816 rattus norv
24	35	81.4	1814	1	TSC2_MOUSE	Q61037 mus musculu
25	34	79.1	149	2	Q6Y1Z6	Q6y1z6 pagrus majo
26	34	79.1	149	2	AAP20218	Aap20218 pagrus ma
27	34	79.1	285	2	Q31388	Q31388 cyprinus ca
28	34	79.1	560	2	Q73MF8	Q73mf8 treponema d
29	34	79.1	560	2	AAS12067	Aas12067 treponema
30	34	79.1	681	1	RPOC_ANTFO	Q85cl6 anthoceros
31	34	79.1	808	2	Q6BZI1	Q6bzi1 debaryomyce
32	34	79.1	964	2	Q7UJS8	Q7ujs8 rhodopirell
33	34	79.1	1116	2	O18415	O18415 drosophila
34	34	79.1	1127	2	Q9VM62	Q9vm62 drosophila
35	34	79.1	1127	2	AAF52463	Aaf52463 drosophil
36	33	76.7	257	2	Q9MBR8	Q9mbr8 staphylococ
37	33	76.7	345	2	Q6F7M9	Q6f7m9 acinetobact
38	33	76.7	509	2	Q8TWC3	Q8twc3 methanopyru
39	33	76.7	874	2	Q9XGC1	Q9xgc1 vigna ungui
40	32	74.4	35	2	Q88G77	Q88g77 pseudomonas
41	32	74.4	99	2	Q7SFM5	Q7sfm5 neurospora
42	32	74.4	99	2	CAE76192	Cae76192 neurospor
43	32	74.4	175	2	Q6ZSS5	Q6zss5 homo sapien
44	32	74.4	175	2	BAC86871	Bac86871 homo sapi
45	32	74.4	181	2	Q6BGJ7	Q6bgj7 paramecium

ALIGNMENTS

RESULT 1
IF33_HUMAN
ID IF33_HUMAN STANDARD; PRT; 352 AA.
AC O15372;
DT 30-MAY-2000 (Rel. 39, Created)
DT 30-MAY-2000 (Rel. 39, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Eukaryotic translation initiation factor 3 subunit 3 (eIF-3 gamma)
DE (eIF3 p40 subunit) (eIF3h).
GN Name=EIF3S3;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Liver;
RX MEDLINE=98001678; PubMed=9341143;
RA Asano K., Vornlocher H.-P., Richter-Cook N.J., Merrick W.C.,
RA Hinnebusch A.G., Hershey J.W.B.;
RT "Structure of cDNAs encoding human eukaryotic initiation factor 3
RT subunits. Possible roles in RNA binding and macromolecular assembly.";
RL J. Biol. Chem. 272:27042-27052(1997).
RN [2]
RP SEQUENCE FROM N.A.
RA Schmidt O.G., von Holtum D., Gross S., Horsthemke B., Luedecke H.-J.;
RT "The gene encoding the p40 subunit of the translation initiation
RT factor eIF3 has 8 exons, maps to the Langer-Giedion syndrome region on
RT chromosome 8q24, but is not the TRPS gene.";
RL Submitted (SEP-1998) to the EMBL/GenBank/DDBJ databases.
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=Lung;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).

```
CC   -!- FUNCTION: Binds to the 40S ribosome and promotes the binding of
CC       methionyl-tRNAi and mRNA. Associates with the p170 subunit of
CC       EIF3.
CC   -!- SUBUNIT: eIF-3 is composed of at least 12 different subunits.
CC   -!- SIMILARITY: Contains 1 MPN (JAB/Mov34) domain.
CC   ---------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use by non-profit institutions as long as its content is in no way
CC   modified and this statement is not removed. Usage by and for commercial
CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ---------------------------------------------------------------------
DR   EMBL; U54559; AAD03465.1; -.
DR   EMBL; AF092576; AAC84044.1; -.
DR   EMBL; AF092569; AAC84044.1; JOINED.
DR   EMBL; AF092570; AAC84044.1; JOINED.
DR   EMBL; AF092571; AAC84044.1; JOINED.
DR   EMBL; AF092572; AAC84044.1; JOINED.
DR   EMBL; AF092573; AAC84044.1; JOINED.
DR   EMBL; AF092574; AAC84044.1; JOINED.
DR   EMBL; AF092575; AAC84044.1; JOINED.
DR   EMBL; BC000386; AAH00386.1; -.
DR   MEROPS; M67.971; -.
DR   Genew; HGNC:3273; EIF3S3.
DR   Reactome; O15372; -.
DR   MIM; 603912; -.
DR   GO; GO:0005852; C:eukaryotic translation initiation factor 3 . . .; TAS.
DR   GO; GO:0008135; F:translation factor activity, nucleic acid b. . .; TAS.
DR   GO; GO:0006446; P:regulation of translational initiation; TAS.
DR   InterPro; IPR003639; Mov34-1.
DR   InterPro; IPR000555; Mov34_MPN_PAD1.
DR   Pfam; PF01398; Mov34; 1.
DR   ProDom; PD363422; Mov34_1; 1.
DR   SMART; SM00232; JAB_MPN; 1.
KW   Initiation factor; Protein biosynthesis.
FT   CONFLICT     73     73       E -> K (in Ref. 2).
SQ   SEQUENCE   352 AA;  39930 MW;  F3A6EFA0CEF587D0 CRC64;

  Query Match             100.0%;  Score 43;  DB 1;  Length 352;
  Best Local Similarity   100.0%;  Pred. No. 2.3;
  Matches    9;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 NLQLLMDRV 9
              |||||||||
Db        242 NLQLLMDRV 250


RESULT 2
Q6P9U8
ID   Q6P9U8       PRELIMINARY;       PRT;   352 AA.
AC   Q6P9U8;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Eukaryotic translation initiation factor 3, subunit 3 gamma,
DE   40kDa.
GN   Name=Eif3s3;
OS   Rattus norvegicus (Rat).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX   NCBI_TaxID=10116;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Pituitary gland;
RX   MEDLINE=22388257; PubMed=12477932;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Pituitary gland;
RA   Strausberg R.;
RL   Submitted (OCT-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC060586; AAH60586.1; -.
DR   GO; GO:0003743; F:translation initiation factor activity; IEA.
DR   InterPro; IPR000555; Mov34_MPN_PAD1.
DR   Pfam; PF01398; Mov34; 1.
DR   SMART; SM00232; JAB_MPN; 1.
KW   Initiation factor.
SQ   SEQUENCE   352 AA;  39905 MW;  C06307269ADBB343 CRC64;

  Query Match             100.0%;  Score 43;  DB 2;  Length 352;
  Best Local Similarity   100.0%;  Pred. No. 2.3;
  Matches    9;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 NLQLLMDRV 9
              |||||||||
Db        242 NLQLLMDRV 250


RESULT 3
AAH60586
ID   AAH60586     PRELIMINARY;       PRT;   352 AA.
AC   AAH60586;
DT   14-APR-2004 (TrEMBLrel. 27, Created)
DT   14-APR-2004 (TrEMBLrel. 27, Last sequence update)
DT   14-APR-2004 (TrEMBLrel. 27, Last annotation update)
DE   Eukaryotic translation initiation factor 3, subunit 3 gamma,
DE   40kDa.
OS   Rattus norvegicus (Rat).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX   NCBI_TaxID=10116;
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RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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